COMMISSIONERS APPROVAL

ROKOSCH

GRANDSTAFF

THOMPSON OX

CHILCOTT Y

DRISCOLL VS

Date......August 23, 2007

Minutes: Glenda Wiles

The Board held a public hearing on a Floodplain variance request by Montana Department of Transportation. Present at this meeting was Floodplain Administrator Laura Hendrix, Planner Vanessa Perry, Montana Department of Transportation Representatives Shane Stack and Russ Brewer.

Laura presented the Request for Commission Action as follows:



Planning Department 215 South 4th Street, Suite F Hamilton, MT 59840 Phone 406-375-6530 Fax 406-375-6531 planning@ravallicounty.mt.gov

REQUEST FOR COMMISSION ACTION

OG-07-08-898

Meeting:

August 23, 2007 at 1:00 pm

Request:

To act on a Floodplain Permit Application Variance

Request

I. ACTION REQUESTED

This is a request from the Montana Department of Transportation (MDT) to approve a **Variance Request** to meet the minimum development standards of the adopted Ravalli County Floodplain Regulations as part of a Floodplain Permit Application.

II. BACKGROUND

MDT has submitted a Floodplain Permit Application and Variance Request (file reference FA-07-08) to complete work within the 100-year floodplain of the Bitterroot River. The purpose of the project is to stabilize an eroding bank in order to repair damage to the West Fork Road in Conner. The project design proposes the placement of rip-rap higher than the natural bank and above the base flood elevation. The development criteria for bank stabilization in the Floodplain Regulations specify that the bank treatment must not extend higher that the natural bank or higher than the base flood elevation. The applicant's proposal to extend the bank revetment higher than the natural bank and above the base flood elevation varies from the development standards of the Ravalli County Floodplain Regulations.

III. RECOMMENDED MOTIONS

That the variance request from the Ravalli County Floodplain Regulations, Chapter 4, Table 4-6-1 for the proposed placement of rip-rap above the natural bank and above the base flood elevation in the floodway portion of the 100-year floodplain be **approved** based on the positive findings of fact for each of the variance review criteria.

IV. STAFF REPORT

VARIANCE REQUEST

The applicant has requested a variance from the Minimum Development Standards for Bank Stabilization in Chapter 4, Table 4-6-1, of the Ravalli County Floodplain Regulations, that specifies "the treatment does not extend higher than the natural bank or higher than the base flood elevation".

Compliance with Variance Review Criteria

A. There is a hardship on the applicant in carrying out the strict letter of this Code as distinguished from a mere inconvenience.

Findings:

1. The application indicates that there is a significant hardship since the proposed design to extend the rip-rap revetment up to the

- 500-year flood elevation is necessary to reconstruct the failed slope and provide adequate slope stability to support the roadway.
- 2. West Fork Road sustained approximately 200-feet of damage in early Summer, 2006 and has since been closed to road traffic.
- 3. The Floodplain Regulations do not contain a definition of "hardship" or "inconvenience".

Conclusions:

- 1. A hardship in carrying out the strict letter of this Code exists.
- 2. Revising the proposed design to meet the minimum development standards would further delay the re-opening of West Fork Road to local residents and emergency services.
- 3. There is a positive finding on this review criterion.

B. The hardship does not directly result from the actions of the applicant.

Findings:

- 1. The application states that natural channel migration, scour and erosion at the toe of the road embankment reduced slope stability and caused the failure.
- 2. The road embankment is located at a cut-bank, prone to natural erosion processes.

Conclusions:

- 1. The site conditions at the embankment require that project design to extend above the natural bank and 100-year flood elevation.
- 2. The hardship is not a direct result of the actions of the applicant.
- 3. There is a positive finding on this review criterion.

C. The variance is the only option available to the applicant to afford relief from the hardship.

Findings:

- The application asserts that the embankment slope must be reconstructed in order to repair the damaged road and restore traffic flow.
- 2. Site conditions and the location of the slope failure limit the options available to the applicant.

Conclusions:

- 1. The variance is the only option available to the applicant to afford relief from the hardship.
- 2. No other viable options have been presented for consideration.
- 3. There is a positive finding on this review criterion.

D. The variance is the minimum necessary to afford relief from the hardship.

Findings:

1. The application identifies that an analysis performed by MDT's

- geo-technical engineers showed that the minimum rip-rap revetment must extend to the 500-year flood elevation in order to reconstruct the failed slope and provide the necessary slope stability.
- 2. The application indicates that the variance is the minimum necessary to return the roadway to a safe working condition.

Conclusions:

- The project design does not involve an excessive amount of riprap and does not extend up the entire embankment to the roadway.
- 2. The variance is the minimum necessary to afford relief from the hardship.
- 3. There is a **positive** finding on this review criterion.
- E. The granting of the variance will not be detrimental to the public health, safety, or general welfare or injurious to other adjoining properties.

Findings:

- Chapter 1-6 (a) of the Ravalli County Floodplain Regulations states: "The purpose of this code is to promote the public health, safety, and general welfare. To that end, this code shall be implemented to protect human life and health to the greatest extent."
- 2. The application maintains that the adjoining properties will not be adversely impacted by the proposed project rather, that the project will be beneficial to public health, safety and general welfare by reducing the hazardous conditions that currently exist at the site.

Conclusions:

- 1. Without adequate repair, the slope will continue to fail thereby increasing the threat to public health and safety.
- 2. The granting of the variance will not be detrimental to the health, safety or general welfare of the public or injurious to adjoining properties.
- 3. There is a positive finding on this review criterion.
- F. The variance will not result in increased flood hazards, present additional threats to public safety, be an extraordinary public expense, create a nuisance, or conflict with existing state or other local laws.

Findings:

- 1. Chapter 1-8 (a) of the Ravalli County Floodplain Regulations states that "proposed projects shall comply with all other applicable local, state and federal rules or regulations".
- 2. The application verifies that the proposed project has been designed and will be constructed in accordance with all applicable

- rules and regulations.
- The application illustrates that the proposed design intends to eliminate the existing public nuisance and threats to public health and safety by designing and building a more stable road embankment.
- 4. The application indicates that although the rip-rap extends above the 100-year flood elevation, the hydraulic model (HEC-RAS) proves that there will be no impact to water surface profiles and therefore no increase in flood hazards during flood events.

Conclusions:

- 1. Although the project as proposed does not meet the minimum development standards in the Ravalli County Floodplain Regulations, the project is in compliance with the development standards of ARM 36.15.606 (1)(b).
- 2. The proposed project meets all other minimum requirements of the Ravalli County Floodplain Regulations.
- The proposed variance will not result in increased flood hazards, present additional threats to public safety, be an extraordinary public expense, create a nuisance, or conflict with existing state or other local laws.
- 4. There is a **positive** finding on this review criterion.

G. A reasonable alternate location that would not require a variance is not available.

Findings:

1. The application indicates that the inherent location of the slope failure constrains any other alternative locations.

Conclusions:

- 1. Reasonable alternate locations that would not require a variance are not available.
- 2. There is a positive finding on this review criterion.

H. The proposed use would be adequately protected and flood-proofed.

Findings:

 The application demonstrates that proposed revetment is designed to withstand 100-year flood flows and larger magnitude flood events.

Conclusions:

- The project design has been reviewed and approved by hydraulic engineers to withstand flood flows and adequately protect the embankment.
- 2. The proposed use will be adequately protected and flood-proofed.
- 3. There is a **positive** finding on this review criterion.

V. REMAINING ISSUES:

- 1. Within five (5) days following the decision and if the Board approves the variance or approves it with conditions, the Floodplain Administrator shall mail the decision to the Department of Natural Resources and Conservation for concurrence, modification, or rejection (Note: The DNRC has the ability to modify or void the decision of the Board of County Commissioners.)
- 2. The Floodplain Administrator shall mail the variance decision to the applicant within seven (7) days of the date of the decision.

Attachments: Exhibit A-Floodplain Map

Exhibit A-1-Ravalli County Floodplain Regulations, Table

4-6-1

Exhibit A-2-Ravalli County Floodplain Regulations,

Variances, Chapter 6

Exhibit A-3-Floodplain Variance Application

Exhibit A-4-Proposed slope profile

Exhibit A-5-ARM 36.15.606

Staff:

Laura Hendrix, CFM Floodplain Administrator

Date:

August 17, 2007

Laura gave some background to the application which included the slope failure in May 2006 (which equated to a four to five year flood event). The purpose is to stabilize the eroding bank, as the road has been closed for quite some time. The placement of the riprap will be higher than the natural bank and therefore a variance from the minimum development standards for bank stabilization must be granted in order to move forward with the placement of riprap. Laura reviewed the eight criteria, showing a positive finding on all criteria.

She stated once the Board approves the variance, the approval will be sent to DNRC and they have the ability to supersede the Board of County Commissioners' decision. Laura is hopeful the Board of County Commissioners will approve this variance today so the Montana Department of Transportation can move forward with the necessary repairs.

Public Comment was called for.

Shane stated Russ is the engineer who designed this model.

No other public comment was made. Board deliberation then took place. Commissioner Thompson commented they have watched the river undercut this area for several years. The road then sloughed and created the need to close the road. Several residents have had to take the 'long way home'. He agreed where the bend comes around, it seems necessary to 'hard rip rap' that area. Commissioner Chilcott stated he appreciates

MDOT's ability to find the funding in order to repair this road. Commissioner Rokosch also noted his appreciation and expressed concern over the fires this year (being able to have through traffic in the event of an emergency).

Shane noted the money is coming from the Secondary Highway Funds and the cost is approximately one million dollars. The project is scheduled to bid the first of September. They hope to complete the construction this fall which will include the top soil seeding and paint markings by winter. However, the chip sealing and other balance of work will not be completed until the spring of 2008.

Commissioner Chilcott made a motion that the variance request from the Ravalli County Floodplain Regulations, Chapter 4, Table 4-6-1 for the proposed placement of rip-rap above the natural bank and above the base flood elevation in the floodway portion of the 100-year floodplain be approved based on the positive findings of fact for each of the variance review criteria.

Commissioner Thompson seconded the motion. Discussion: Commissioner Rokosch asked about the horizontal difference of the 100 versus 50 flood event. Russ stated at most it is one foot. All voted "aye". The hearing was adjourned.

In other business, Commissioner Chilcott attended a BREDD meeting in Missoula during the afternoon hours.